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A query scrambler for search privacy on the internet

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Title:	A query scrambler for search privacy on the internet
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Abstract:	We propose a method for search privacy on the Internet, focusing on enhancing plausible deniability against search engine query-logs. The method approximates the target search results, without submitting the intended query and avoiding other exposing queries, by employing sets of queries representing more general concepts. We model the problem theoretically, and investigate the practical feasibility and effectiveness of the proposed solution with a set of real queries with privacy issues on a large web collection. The findings may have implications for other IR research areas, such as query expansion and fusion in meta-search. Finally, we discuss ideas for privacy, such as k-anonymity, and how these may be applied to search tasks.